# Office of Response and Restoration Our role in the Delaware River and Alaska oil spills





Office of Response and Restoration - Protecting and restoring coastal resources at oil spills and chemical release sites for over 30 years



#### What we do

- Provide scientific response for oil and chemical spills
- Protect, assess, and restore coastal resources at hazardous waste and oil spill sites
- Share expertise to address critical local and regional problems







### Provide response support

- Coordinate on-scene scientific activities and provide scientific support at incidents
- Work with local communities on contingency plans for oil and other hazardous substance spills, homeland security, WMD, and natural disasters
- Develop tools and provide training for spill preparedness, response and planning
- Improve knowledge and tools for decision making

#### Address oil and hazardous waste sites

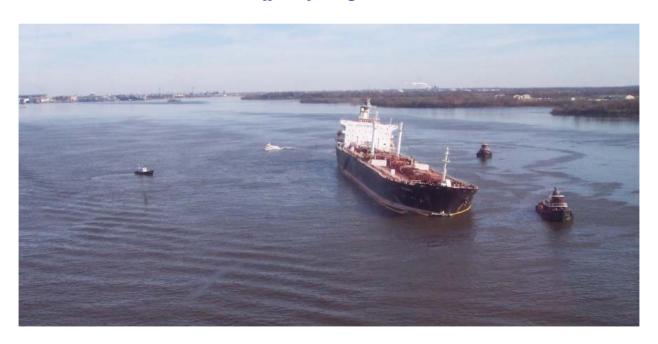
- Conduct natural resource damage assessments to restore coastal resource injuries
- Implement restoration projects to address injuries
- Resolve natural resource damage liability cooperatively
- Recover funds to restore resources
- Provide support for Brownfield sites, priority watersheds, and port development
- Provide training for partners on rapid assessment, damage assessment, and restoration

#### Program results

- Provide scientific support at over 100 events/year
- Protect sensitive areas more quickly
- Recommend cleanups that minimize cost and maximize environmental protection
- Assess and restore the public's natural resources—working at ~295 oil spill and hazardous waste sites
- Cooperate with industry for cost-effective and time-efficient restoration (e.g. Pepco, DuPont, ChevronTexaco)
- Helped generate over \$300 million for restoration

## T/V Athos I Delaware River Spill

Ed Levine, Office of Response & Restoration



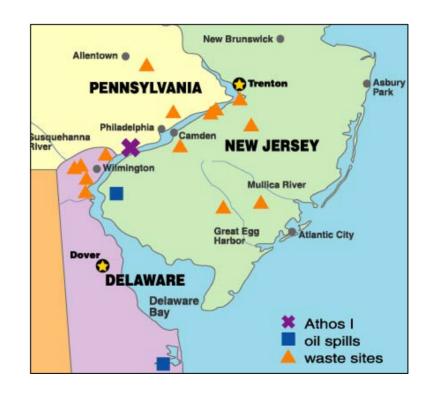
#### Incident - November 26, 2004

- Struck submerged object during docking at Citgo facility
- Created two holes in port and center tanks
- Initial estimate ~30,000 gallons released
- Total of 264,000 gallons released
- Venezuelan heavy crude
- Very dense and viscous cold honey



#### Collision site & other ORR efforts

Location of Athos I site and other areas where NOAA is in various stages of remediation, cleanup, and restoration



## Submerged and pooled oil

- Greatest concerns—continued fouling, migration, and remobilization
- Impact created two trenches of pooled oil with ~ 4000 gallons
- Recovery through dredging, sorbents, and pumping



#### Resources at risk

- Birds migratory, peregrine falcons, bald eagles
- Fish juveniles and larvae, short nosed sturgeon
- Shellfish blue crab (larvae), oysters and clams
- Wildlife turtles, mink, muskrats, otters, and others
- Lost use fishing, boating, hunting, power plant, and others
- Marshes grasses, endangered plants, and wild rice



## NOAA on-scene support

- Assisting with locating, quantifying, and recovering submerged oil
- Providing science for reopening Salem Nuclear Power Plant and the port of Philadelphia
- Conducting natural resource damage assessment
- Modeling trajectory of oil
- Identifying resources at risk
- Mapping sensitive habitats
- Managing information ResponseLink
- Assisting navigational response team channel surveys, rescue, sonar

#### Trustees

- Federal
  - NOAA (lead)
  - *U.S. FWS*
- State of Delaware
- State of New Jersey
- Commonwealth of Pennsylvania



### Next steps

- Continuing to assist cleanup
- Conducting natural resource damage assessment
  - 2-4 year effort
  - Work cooperatively with responsible party and cotrustees
  - Collect data and conduct injury studies
  - Identify full extent of resource and service injuries
  - Develop assessment and restoration plan
  - Implement restoration projects to address injuries

## M/V Selendang Ayu Alaska Oil Spill

Rob Ricker, Office of Response & Restoration



## M/V Selendang Ayu

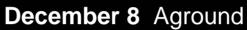
- 738-foot Malaysian freighter
- Bulk carrier of soybeans
- Washington to China



Unalaska Island



## M/V Selendang Ayu









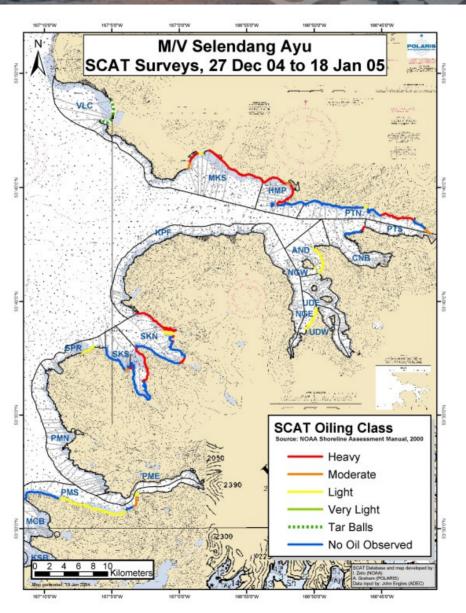
#### Release and salvage

- Amount of fuel originally aboard
  - 424,000 gallons Intermediate Fuel Oil IFO 380
  - 21,000 gallons marine diesel
- Amount known spilled
  - 40,000 gallons IFO 380
- Amount lightered
  - 79,500 gallons IFO 380/water and marine diesel, combined
- Total amount unaccounted for
  - 325,500 gallons



All numbers are estimates as of 25 January 2005

Shoreline Cleanup Assessment Teams



#### Trustees

- Federal
  - NOAA
  - USFWS (lead)
- State of Alaska
  - Department of Environmental Conservation
  - Department of Fish and Game
  - Department of Natural Resources
  - Department of Law

Also coordinating with Qawalangin and TDX tribes



#### Resources at risk

- Shoreline 124 miles surveyed
   of 340 miles for survey segments;
   43 miles observed with oil;
- Birds 970 dead oiled birds observed
- Fish and shellfish e.g., Tanner crab, halibut, salmon
- Marine mammals 18 oiled, 5 dead otters





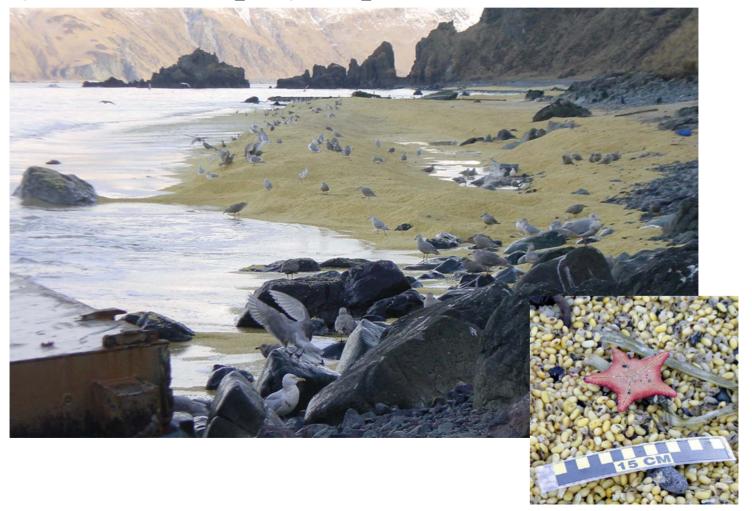
#### Commercial fisheries

- State of Alaska: "zero tolerance" for oil contamination of seafood
- All Commercial Fisheries closed for Makushin and Skan Bays
- Rigid inspections ongoing for catch from other areas — no contamination found





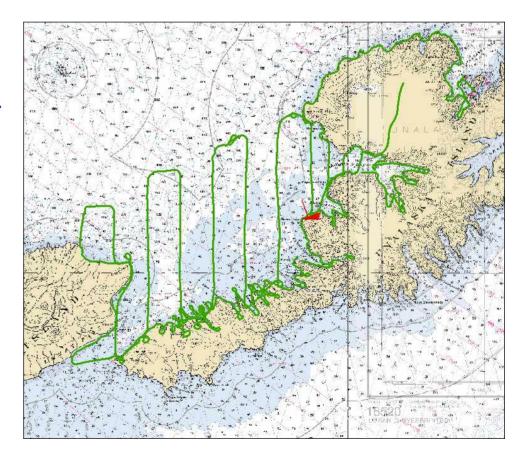
## Soy Beans on Spray Cape



#### Aerial and ground surveys

- Oil (surface and submerged)
- Coastal and pelagic seabirds
- Marine mammals
- Stream assessments
- Shoreline habitat





Heavily oiled streams. Storms drove oil up stream channels, above the normal tidal range.
NOAA is surveying salmon streams for the presence of oil.



## Ongoing Response & NRDA activities











### Questions?

Office of Response and Restoration—David Kennedy

Athos I Delaware River oil spill—Ed Levine

Selendang Ayu Alaska oil spill—Rob Ricker

